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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,074	02/01/2001	Gerhard Reichert	1663-I-CIP	8012

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EXAMINER	
A, PHI DIEU TRAN	
ART UNIT	PAPER NUMBER
3633	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/775,074	REICHERT, GERHARD	
	Examiner	Art Unit	
	PHI D. A	3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-30,32,33,36-39,41-49,69 and 71-74* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-26,28-30,32,33,36-39,41-49,69 and 71-74* is/are rejected.

7)☒ Claim(s) *27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The indicated allowability of claims 36-39, 41-43, 26, is withdrawn in view of the newly discovered reference(s) to Reed, Baier, Kassl. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23, 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed (4567710).

Reed (figure 1, 13) shows a simulated divided lite insulating glazing unit having an internal muntin bar grid (33, 36, 35, figure 13), the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer (figure 2), the glass sheets and the spacer defining an insulating chamber, an internal muntin bar grid disposed inside the chamber, the internal bar grid extending between different portions of the spacer to divide the chamber into separate lites to provide a divided lite appearance to the unit, the internal bar grid having a plurality of inner muntin grid elements that each has a longitudinal direction, and a plurality of flexible, collapsible outer muntin grid elements (9, figure 13) that has a longitudinal direction, the inner grid elements crossing each other and being arranged in a grid that defines the pattern of the internal bar grid, the outer muntin grid elements surrounding the inner muntin grid elements to completely hide the internal muntin bar grid from view, when viewed in a cross section taken perpendicular to the

longitudinal direction (the direction of cross section is from the outside of the unit parallel to the glazing panes), the outer muntin grid element completely surrounding the inner muntin grid element, the outer muntin grid elements are in the form of continuous tubes disposed around the inner muntin grid elements, the outer muntin grid elements are connected to the inner muntin grid elements with connectors (28, 30), at least one of the outer muntin grid elements includes at least one protruding foot (25) that increases the width of the outer muntin grid element(from being just flat), the foot protruding in a direction perpendicular to the first and second glass sheets.

3. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Reed (4567710).

Reed (figure 1, 13) shows a simulated divided lite insulating glazing unit having an internal muntin bar grid (33, 36, 35, figure13), the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer (figure 2), the glass sheets and the spacer defining an insulating chamber, an internal muntin bar grid disposed inside the chamber, the internal bar grid extending between different portions of the spacer to divide the chamber into separate lites to provide a divided lite appearance to the unit, the internal bar grid having an inner muntin grid element (33, 36, 35) and a flexible, collapsible outer grid element, the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element from view on both sides of the insulation glazing unit (the sides looking at the surfaces 9 and 26), the outer muntin grid element having a longitudinal direction, the outer muntin grid element defining a longitudinal slit, that allows the outer muntin grid element to be opened and wrapped around the inner muntin grid element.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 24, 69, 71-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed shows all the claimed limitations except for the muntin outer grid being made of foam material.

Baier discloses the use of foam material for forming a muntin grid (22).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the muntin outer grid being made of foam material as taught by Baier because foam material is a well known plastic material for forming muntin grid, and the use of foam material to foam a flexible muntin grid would have been obvious to one having ordinary skill in the art.

Per claim 73, Reed as modified shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the outer muntin grid elements being notched at the lap joints because it would allow the outer elements to continue covering the inner elements beyond the joint area.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed shows (figure 1, 13) shows a simulated divided lite insulating glazing unit having an internal muntin bar grid (33, 36, 35, figure13), the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer (figure 2), the glass sheets and the spacer defining an insulating chamber, an internal muntin bar grid disposed inside the chamber, the internal bar grid extending between different portions of the spacer to divide the chamber into separate lites to provide a divided lite appearance to the unit, the internal bar grid having an inner muntin grid element (33, 36, 35) and a flexible, collapsible outer grid element, the outer grid element being a collapsible tube capable of being collapsed upon itself and reopened to a tube form, the tube defining a slit that allows the tube to be wrapped around the inner muntin grid element (33, 37, 36, 35), the slit extending from the inner surface to the outer surface of the outer muntin grid element,

Reed does not show the outer grid element being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being resilient because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

7. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed as modified shows (figure 1, 13) shows all the claimed limitations for the muntin outer grid being made of foam material and the foam material including a desiccant.

Baier discloses the use of foam material for forming a muntin grid (22), a desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the muntin outer grid being made of foam material as taught by Baier because foam material is a well known plastic material for forming muntin grid, and the use of foam material to foam a flexible muntin grid would have been obvious to one having ordinary skill in the art, and the foam material including a desiccant as taught by Baier would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

8. Claims 39, 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed shows (figure 1, 13) shows a simulated divided lite insulating glazing unit having an internal muntin bar grid (33, 36, 35, figure13), the unit comprising first and second spaced glass sheets spaced apart by a perimeter spacer (figure 2), the glass sheets and the spacer defining an insulating chamber, an internal muntin bar grid disposed inside the chamber, the internal bar grid extending away from the spacer to divide the chamber into separate lites to provide a divided lite appearance to the unit, the internal bar grid having an inner muntin grid element (33, 36, 35), an outer muntin grid element having an inner surface and an outer surface, the outer grid element being in a form of a tube disposed around the inner muntin grid element to hide the inner element from view on both sides of the unit when the gird piece is installed, the tube having a sidewall and defining a slit that allows the tube to be opened and wrapped around the inner muntin grid element, the slit extending from the inner surface to the outer surface through the sidewall of the tube (thus forming the opened channel/slit), the slit in the outer

muntin grid element defining opposed ends, the opposed ends being angled away from each other,

Reed does not show the outer grid element being foam material.

Baier discloses the use of foam material for forming a muntin grid (22).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the muntin outer grid being made of foam material as taught by Baier because foam material is a well known plastic material for forming muntin grid, and the use of foam material to foam a flexible muntin grid would have been obvious to one having ordinary skill in the art.

Per claim 41, Reed as modified shows all the claimed limitations except for the outer element having a desiccant.

Baier further discloses the use of desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the foam material including a desiccant as taught by Baier would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

Per claim 43, Reed as modified does not show the outer grid element being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the outer muntin grid elements being resilient because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Baier (5345743).

Reed as modified shows all the claimed limitations except for the foam material including a desiccant.

Baier further discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the foam material including a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

10. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed.

Reed shows all the claimed limitations except for the outer muntin grid elements being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being resilient because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

Per claim 33, Reed as modified further shows each collapsible tubes being capable of being collapsed upon itself and reopened to a tube form.

11. Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl et al (5351459).

Reed shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints, the body defining one corner notch for each corner of the inner muntin grid element, the corner extending into the body of the outer muntin grid element, the corner being spaced apart to align with the corners of the inner muntin grid element.

Kassl et al discloses the outer muntin grid elements being notched at the lap joints.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being notched at the lap joints as taught by Kassl et al because it would allow the outer elements to continue covering the inner elements beyond the joint area, and having the corner notch would enable the outer muntin grid element to easily fold around the inner muntin grid element without imparting substantial stress on the outer element.

12. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl et al.

Reed as modified shows all the claimed limitations except for the outer muntin grid elements being resilient.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the outer muntin grid elements being resilient because having the grid elements formed of resilient material would allow the outer grid elements to repeatedly flex and hold tight to the inner grid elements.

13. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl et al and further in view of Baier (5345743).

Reed as modified shows all the claimed limitations except for the muntin outer grid being made of foam material.

Baier discloses the use of foam material for forming a muntin grid (22).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the muntin outer grid being made of foam material as taught by Baier because foam material is a well known plastic material for forming muntin grid, and the use of foam material to foam a flexible muntin grid would have been obvious to one having ordinary skill in the art.

14. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl et al and Baier (5345743).

Reed as modified shows all the claimed limitations except for the foam material including a desiccant.

Baier further discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's modified structure to show the foam material including a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panels clear.

15. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl.

Reed as modified shows all the claimed limitations except for an adhesive connected to the body.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to an adhesive connected to the body since it would enhance the secured attachment of the outer grid to the inner grid.

16. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kassl et al (5351459).

Reed shows all the claimed limitations except for the outer muntin grid elements being notched at the lap joints, the body defining one corner notch for each corner of the inner muntin grid element, the corner extending into the body of the outer muntin grid element, the corner being spaced apart to align with the corners of the inner muntin grid element.

Kassl et al discloses the outer muntin grid elements being notched at the lap joints.

17. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Reed's structure to show the outer muntin grid elements being notched at the lap joints as taught by Kassl et al because it would allow the outer elements to continue covering the inner elements beyond the joint area, and having the corner notch would enable the outer muntin grid element to easily fold around the inner muntin grid element without imparting substantial stress on the outer element.

Allowable Subject Matter

18. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

19. Applicant's arguments with respect to claims 23-30, 32-33, 36-39, 41-49, 69, 71-74 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phi D A/
Examiner, Art Unit 3633

Phi Dieu Tran A

7/20/08